

REMARKS/ARGUMENTS

Claims 1 – 6 remain in the application for consideration.

1. The requirement for restriction has been made final. In accordance with the request of the examiner, non-elected claims 7 – 11 have been canceled to expedite prosecution. This action is taken without prejudice to applicant's right to file a divisional application under the provisions of 35 USC § 121.

2. Claim 4 has been amended to correct an inadvertent typographical error.

3. Claims 1 – 6 have been rejected under 35 USC § 103(a) as being unpatentable over U.S. Patent 5,434,707 ("Dalzell et al.") in view of U.S. Patent 6,319,433 ("Kohan"). In support of the rejection the examiner has stated that Dalzell et al. discloses the basic claimed method lacking at most the aspect of the concave platen holding a volume of polymerizable composition on its forming surface and that Kohan teaches making glasses which have a hard coating made by applying a hard coat liquid to the concave surface of a mold and polymerizing the liquid onto a preformed lens.

Applicant traverses this ground of rejection. The advantageous method recited in claims 1 – 6 of the application is not taught by the references within the meaning of 35 USC § 103.

Applicant's claimed method is directed to the formation of shaped, or curved, plastic lenses having substantially no optical power by forming a layer of an optically clear highly scratch-resistant polymeric material on the convex surface of a lens via in-situ polymerization. Initially, a planar lens blank of substantially uniform thickness is interposed between heated curved platens with an appropriate amount of a polymerizable composition being present in the concave surface of one platen.

The radii of curvature of the concave and convex platens conform to a specified relationship. The platens are heated and pressed together whereby the polymerizable composition is caused to cover the convex surface of the shaped lens structure and polymerize to form a scratch-resistant layer of non-uniform thickness.

The maximum thickness of the scratch-resistant layer is in the central region of the lens with the thickness diminishing gradually radially toward the periphery of the lens.

Dalzell et al., the primary reference, teaches a method for forming shaped lenses having substantially no optical power. According to Dalzell et al., a laminate is arranged between platens having predetermined radii of curvature (conforming to the same relationship as the platens utilized in the presently claimed method) and the platens are heated and pressed together to form a lens which has maximum thickness in the center and a gradient diminishing thickness toward the periphery of the lens.

Dalzell et al., as is acknowledged by the examiner, does not teach or suggest forming a layer of a material on the lens via in-situ polymerization.

Kohan teaches a method for forming a lens, which may be non-prescription, using a vacuum mold. The method involves the use of a flexible mold in a manner to render it pliable and deformable so that it can be deformed under vacuum suction and curing of a monomer within the mold to form an otherwise conventional wafer lens that is adhered to a base lens (see column 6, lines 1 – 13).

The method of Kohan is illustrated in Figs. 1 and 2. A stock lens 54 is positioned above flexible mold 38 which has a disc shape and which contains a monomer 52. The flexible mold is heated and seated within base tool 16. A vacuum motor is turned on and creates a suction force to pull the heated flexible mold into the base tool.

The force of the suction causes the concave surface of the flexible mold to deform to the convex curve of the base lens and the monomer is laminated about the base lens to develop a wafer lens through a slow cure. Once the wafer lens is cured, it is separated from the stock lens and a predetermined amount of ultra-violet or visible light curable adhesive is introduced and the stock lens is repositioned on the wafer lens to evenly spread the adhesive. The combination of the stock lens, adhesive and wafer lens are cured again to form the finished product.

The disclosure of Kohan, in combination with that of Dalzell et al., does not teach or suggest applicant's claimed method. There are significant differences between the method of Kohan and that of applicant. In applicant's claimed method the in-situ polymerization of a polymerizable composition provides a layer of non-uniform thickness directly on the convex surface of a deformed lens blank. Kohan teaches the formation of a wafer lens which apparently is of substantially uniform thickness and which subsequently has to be adhered to a base lens by an adhesive. Applicant's method utilizes a lens blank of substantially uniform thickness whereas the Kohan method uses a lens blank which is not of substantially uniform thickness. The method of Kohan utilizes a flexible mold whereas applicant's method does not.

The examiner has acknowledged that the primary reference, Dalzell et al., does not teach in-situ polymerization of a polymerizable composition to form a layer of non-uniform thickness on a lens blank but has concluded that it would have been obvious to one of ordinary skill in the art from the disclosure of Kohan to do so. The references, viewed in combination, do not teach or suggest applicant's claimed method within the meaning of 35 USC § 103.

In order to provide adequate support for the rejection of claimed subject matter under 35 USC § 103 a combination of references must provide an incentive for those skilled in the art to do what applicant has done. Here, the references do not meet this test. In essence, the examiner has taken from Kohan only so much of the disclosure as is required to support the rejection out of the overall context of the disclosure.

Kohan does teach the formation of a wafer lens by curing a monomer. However, as pointed out above, this teaching is in the context of a method which differs significantly from that of applicant and also from that of the primary reference, Dalzell et al. Thus, one skilled in the art and knowing of Dalzell et al. and Kohan would find no suggestion or incentive to utilize a polymerizable composition to form a layer of non-uniform thickness on a lens blank such as is taught by Dalzell et al. Here, taking from Kohan only the teaching of forming a wafer lens by in-situ curing of a monomer, out of the overall context of the method taught by the reference,

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amounts to impermissible hindsight reconstruction of the teachings of the references to arrive at applicant's claimed method.

Here, only applicant's detailed and extensive teaching is sufficient to place the claimed method in the possession of those skilled in the art. Thus, the references relied upon to support the rejection do not provide adequate support for the rejection under 35 USC § 103. Reconsideration of the rejection and withdrawal thereof are respectfully requested.

In summary, the claims are proper in form for allowance and in substance have been shown to recite subject matter which is novel and patentably distinguishable over the references of record. Reconsideration of the application and allowance of the claims are respectfully requested.

Respectfully submitted,



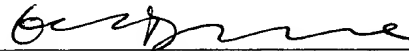
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Date: December 15, 2003



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